## REMARKS/ARGUMENTS

### 1.    SUMMARY

In the Office Action mailed December 22, 2004, the Examiner rejected claims 76 – 118 and 120 – 147.  In addition, the Examiner objected to claims 83, 116 and 147.

In this Reply, claims 76 - 147 have been canceled.  Claims 148 – 175 have been newly added.  Accordingly, claims 148 – 175 are pending in the application.

### 2.    RESPONSE TO § 102 REJECTIONS

In the Office Action mailed December 22, 2004, the Examiner rejected claims 76 – 79, 81 – 83, 86 – 88, 90 - 91 and 131 – 132 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,115,709 to Gilmour et al. (hereinafter, "Gilmour").  The Examiner rejected claims 102 – 105, 108 – 110, 112, 117 – 118, 122 – 124 and 143 - 146 as being anticipated by U.S. Patent No. 6,173,831 to Weinreich et al. (hereinafter, "Weinreich").  In addition, the Examiner rejected claims 134 – 138 as being anticipated by U.S. Patent No. 5,884,270 to Walker et al. (hereinafter, "Walker").

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

> **New independent claim 148 is not anticipated by Gilmour, Weinreich, or Walker,  because none of the references disclose each and every limitation of claim 148.**

Claim 148 states:

> 148.  A computer-implemented method, comprising
> reporting matches to searches initiated by a searcher <u>so</u>

> long as access control criteria are met, the matches
> including potential targets satisfying one or more search
> criteria defined for the searches, and the access control
> criteria (i) being selectably controllable by any of one or
> more persons in one or more chains of person-to-person
> relationships connecting the searcher and the potential
> targets, and (ii) defining attributes of such one or more
> persons and such persons' contacts that may be shared
> with others.

(Claim 148, emphasis added). One aspect of Applicant's invention as claimed in claim 148, which is not disclosed in any of the references cited by the Examiner, is reporting matches to searches based on access control criteria that 1) are selectably controllable by persons in one or more chains of person-to-person relationships, and 2) define attributes of persons and persons' contacts that may be shared with others.

In particular, claim 148 states that the access control criteria are "selectably controllable by any one or more persons in one or more chains of person-to-person relationships connecting the searcher and the potential targets." In addition, the access control criteria "defin[e] attributes of ... persons and such person's contacts that may be shared with others." Accordingly, each person in a chain of persons connecting a searcher and a potential target may selectably control his or her own access control criteria, thereby influencing whether or not a potential target is reported as a match to a searcher's search. Therefore, each two persons forming a connection in a chain of person-to-person connections has a relationship with the connected person that is defined, in part, by access control criteria. Consequently, for a potential target to be reported as a match, not only is the searcher's search criteria relevant, but access control criteria, selectably controllable by each person in the chain of persons from the search to the potential target, must also be met. In essence, the access control criteria, which are set by each person in the system, define the nature and strength of relationships between persons in the system.

For example, one might imagine a chain of person-to-person connections to be represented as the chain A – B – C, where each of A, B and C represents a person.

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In this example, person A has a bilateral direct relationship with person B, and person B has a bilateral direct relationship with person C. However, person A does not have a direct bilateral relationship with person C. According to claim 148, access control criteria define attributes of persons and persons' contacts that may be shared with others. For example, access control criteria controlled by person C may determine whether person C is returned as a match to a search performed by person A. Moreover, access control criteria controlled by person B may determine whether person B is included in a chain of connections between person A and person C that is reported to person A. That is, access control criteria established by person B may define attributes of person C (B's contact) that may be shared with person A (another of B's contacts), or attributes of person A that may be shared with person C.

Gilmour generally relates to a knowledge management system. In particular, Gilmour states:

> ... For example, if a user requests an expert in a certain field via a client browser client 16, the knowledge access server 26 matches the term against both the public and private portions of all user profiles. If a high confidence, but private, match is found, the system cannot reveal the identity of the matched person to the inquirer and must therefore open a "case". The case places a notification in the profile "home" page of the target user and/or transmits an e-mail message with a link back to that page. The target user may then (via a browser):
>
> 1. See the identity of the inquirer and the basis of the match.
>
> 2. See comments added by the inquirer.
>
> 3. Deny the request, at which point the case is closed.
>
> 4. Put a block on any further matches from that person or based on that term.
>
> 5. Go into the profile and edit the term responsible for the match.

> 6. Indicate that the case is accepted and provide
> authorization to reveal the identity of the target to the
> inquirer.
>
> From the perspective of the inquirer, private matches are
> initially returned with a match strength only and do not
> reveal the name of the person or document matched.

(Gilmour, Col. 10, Lines 4 – 41).

According to Gilmour, each user of the knowledgebase system generates a profile containing keywords that are associated with one or more particular knowledge concepts. Each user may mark portions of his or her profile as "private" or as "public." When a searcher performs a search for a person having knowledge in a particular knowledge area, the search may specify several keywords associated with the knowledge area. If the system matches a keyword search with a private portion of another user's profile, that person's identity will not be revealed to the searcher. Accordingly, by allowing each user the ability to mark portions of his or her profile as "public" or "private", each user is granted a rudimentary level of privacy control over **his or her own** profile.

However, because Gilmour does not involve searching for a potential target via a chain of person-to-person connections, Gilmour does not disclose or suggest that one person can control the level of access that a searcher has to a third person. For example, referring again to the example chain of persons A – B – C discussed above, Gilmour suggests that person B can control whether he or she is identified to person A, the searcher. However, Gilmour does not suggest that person B can set access control criteria that will define attributes of person C that may be shared with person A. In particular, Gilmour does not disclose or suggest "reporting matches to searches initiated by a searcher **so long as access control criteria are met,** the matches including potential targets satisfying one or more search criteria defined for the searches, and **the access control criteria (i) being selectably controllable by any of one or more persons in one or more chains of person-to-person relationships**

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**connecting the searcher and the potential targets**, and (ii) **defining attributes** of

such one or more persons **and such persons' contacts that may be shared with**

**others**, as is recited in claim 148. Consequently, Applicant submits that Gilmour

does not anticipate claim 148. Furthermore, for the same reason, Applicant submits

that Gilmour does not anticipate dependent claims 149 – 163, which are dependent

upon claim 148.

Weinreich generally relates to a database system for social networking.

According to Weinreich, a searcher may specify some search criteria to perform a

search for another user. In particular, Wienreich states:

> As it will be understood, by the foregoing
> processes, a very large number of users can become
> established in the database 70 with defined relationships
> to selected other users, and in which other users confirm
> the validity of the defined relationship and perhaps of
> the type of relationship. In this way, a networking
> database is established, verified and confirmed. As will
> be discussed, a registered user can thus access the
> database and determine a chain of overlapping
> confirmed relationships in DSP 12 with any other
> confirmed registered user that is part of the chain.
>
> ...
>
> One such purpose, which is an application of the
> networking database, is to search the database to find a
> member having a particular characteristic in his personal
> profile. Unlike conventional database searching, in
> accordance with the present invention, the networking
> database search also can provide a set of defined
> relationships between selected ones of hundreds or
> millions of thousands of members who respond to the
> search request. This permits the searching user to find a
> linkage of defined relationships between it and the
> member responsive to the search.
>
> ...
>
> At step 1052, the database server 45 searches the
> database 70 in order to find the entered e-mail address.
> If found at step 1053, step 1053B is initiated and the
> result is displayed. The displayed result may list the first

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name, last name, street, city, state, zip code, country,
home phone, work phone, or facsimile of the person
searched. The white page listing parameters to be
displayed may be chosen by the listed member at the
time of registration or later. Further, it is possible that a
member may permit certain of the white page
information to be displayed to non-members, which is
less than what is displayed to valid members. Also,
what is displayed can be changed, as the member
desires.

(Weinreich, Col. 12, Lines 48 – 59; Col. 19, Lines 8 – 25).

According to Wienreich, the database system allows users to define
relationships, and perhaps a type of relationship. However, Weinreich does not
further describe any relationship definitions or types. Instead, Weinreich
suggests that relationships between two persons in the system are defined as
being either *confirmed, pending,* or *denied.* For example, according to Weinreich,
either a relationship exists or it does not. Weinreich states that a user may define
what portions of his or her own profile are displayed to other members and non-
members using the system. Furthermore, according to Weinreich, it is possible
that a member may permit certain of the white page information to be displayed
to non-members, which is less than what is displayed to valid members.
However, this is a form of validation based solely on whether the searcher is a
valid member of the system.

Thus, Weinreich does not disclose or suggest that one person can control
the level of access that a searcher has to a third person via access control criteria.
For example, referring again to the fictitious chain of persons A – B – C,
Weinreich discloses that person C may permit what portions of his or her profile
are displayed to person A, the searcher, based on person A's level of validation
in the system. However, Weinreich does not disclose or suggest any method for
person C to prevent person A from finding person C in the database, nor does
Weinreich disclose or suggest a method for person C to control access by person
A on the basis of the nature or strength of the relationship between any of the

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persons in the chain of connection. Furthermore, Weinreich does not disclose or suggest that person B can set access control criteria that determine attributes of person C that may be shared with person A. Consequently, Weinreich does not disclose or suggest "**access control criteria ... (ii) defining attributes of such one or more persons and such persons' contacts that may be shared with others,**" as is recited in claim 148. Accordingly, Applicant submits that Weinreich does not anticipate claim 148. Furthermore, for the same reason, Applicant submits that Weinreich does not anticipate dependent claims 149 – 163, which are dependent upon claim 148.

Walker generally relates to an employment search system with user controlled anonymous communications. Specifically, Walker states:

> A goal of the invention is to provide a communication system incorporating a central database of information supplied by one or more of parties and managed by a central administrator, where all parties to the system can manage and control the release of any or all information about themselves or their identities, and where such a system allows for electronic-based communications between the parties without the necessity of revealing the identity of either party.

(Walker, Col. 4, Lines 17 – 25).

The system described by Walker allows individual parties to establish rules for the release of information about themselves and their identities. For example, referring again to the chain of people represented as the chain A – B – C, Walker describes a system in which B controls the release of his or her own information and identity. However, Walker does not involve searching for a potential target via a chain of person-to-person connections. More specifically, Walker does not disclose or suggest reporting matches to searches initiated by a searcher **so long as access control criteria are met**, the matches including potential targets satisfying one or more search criteria defined for the searches, and **the access control criteria (i) being selectably controllable by any of one or**

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**more persons in one or more chains of person-to-person relationships connecting the searcher and the potential targets,** and (ii) **defining attributes** of such one or more persons **and such persons' contacts that may be shared with others,** as is recited in claim 148. Consequently, Applicant submits that Walker does not anticipate claim 148. Furthermore, for the same reason, Applicant submits that Walker does not anticipate dependent claims 149 – 163, which are dependent upon claim 148.

### New independent claim 164 is not anticipated by Gilmour, Weinreich, or Walker, because none of the references disclose each and every limitation of claim 164.

Claim 164 states:

> 164. A computer-implemented method, comprising reporting matches to search criteria specified in a search initiated by a searcher <u>so long as the number of person-to-person connections in a chain of person-to-person connections connecting the searcher and a potential target is within a specified connection threshold, the specified connection threshold indicating a maximum number of person-to-person connections to be allowed in establishing said chain of person-to-person connections connecting the searcher and the potential target.</u>

(Claim 164, emphasis added). Accordingly, one aspect of Applicant's invention as claimed in claim 164 involves a specified connection threshold, which indicates a maximum number of person-to-person connections that are allowed in establishing a chain of person-to-person connections connecting the searcher and the potential target. For example, a searcher may specify that only potential targets within a certain degree of connectedness (e.g., two degrees away, or three degrees away) be reported as matching.

Gilmour refers to a method for identifying potential recipients of an email based on a "degree of correspondence" between terms in the email and terms in one or more user profiles. In particular, Gilmour states:

> There is also taught a computer-implemented method and apparatus for addressing an electronic document, such as an e-mail message, for transmission over a computer network. The e-mail message may be examined to identify terms therein. **The identified terms are then compared to a number of user knowledge profiles with a view to detecting a predetermined degree of correspondence between the identified terms and any one or more of the user knowledge profiles.** In the event that a predetermined degree of correspondence is detected, the sender of the electronic document is prompted to the either accept or decline the proposed recipient as an actual recipient of the electronic document, after first being offered an opportunity to inspect the specific basis of the correspondence between the identified terms and the proposed recipients. The e-mail message may also be parsed to extract recipients entered manually by the user. The degree of correspondence between the knowledge profiles of the manually entered recipients and the identified terms of the message is then optionally used as the basis of recommendations to the user that certain manually entered recipients be dropped from the ultimate list of recipients.

(Gilmour, Col. 5, Lines 36 – 57).

According to Gilmour, the "degree of correspondence" refers to the relationship between a threshold value and a "matching metric." Gilmour defines a "matching metric" as a sum of weighted confidence values, which are numerical representations of a degree of correspondence between a term's appearance in an electronic document and a user's profile, which is made up of a weighted list of such terms. Consequently, according to Gilmour, potential recipients of an email are identified according to a "degree of correspondence" between terms in an email and terms in their (i.e., the potential recipient's) user

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profile. This "degree of correspondence" does not refer to or relate to a person-to-person connection in a chain of person-to-person connections connecting a searcher and a potential target, but only to the relationship between one person's query term and another person's list of terms of interest.

Gilmour, thus, does not disclose or suggest "reporting matches to search criteria ... so long as the number of person-to-person connections in a chain of person-to-person connections connecting the searcher and a potential target is within a specified connection threshold ... indicating a maximum number of person-to-person connections to be allowed in establishing said chain of person-to-person connections connecting the searcher and the potential target" as is recited in claim 164. Consequently, Applicant submits that Gilmour does not anticipate independent claim 164. Furthermore, for the same reason, Applicant submits that Gilmour does not anticipate dependent claims 165 – 171, which are dependent upon claim 164.

Weinreich discloses a system that allows a user to search for other members to whom the user is connected, directly or indirectly. For example, Weinreich states:

> Referring to FIG. 15, another preferred embodiment using DSP 12 of the present invention is illustrated which allows a member to search for other members that he is connected to directly or indirectly by defined relationships confirmed to be valid, based on one or more of the criteria entered in the member's personal profile (see FIG. 11). For example, selected criteria may include, among other variations, one of (i) geography; (ii) occupation and geography; (iii) hobby and geography, and (iv) skill and geography. It should be noted that the criteria may be general or more specific. For example, for geographical information, the user may specify the state or, more specifically, the city of the person to be searched. It is also possible the criteria could include organizations such as alumni clubs or place of employment.

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(Weinreich, Col. 20, Lines 41 – 54).

However, in contrast to claim 164, Weinreich does not disclose or suggest allowing a user to limit a search to include only those members within a specified connection threshold. Specifically, Weinreich does not disclose or suggest reporting matches to search criteria … so long as the number of person-to-person connections in a chain of person-to-person connections connecting the searcher and a potential target is within a specified connection threshold … indicating a maximum number of person-to-person connections to be allowed in establishing said chain of person-to-person connections connecting the searcher and the potential target" as is recited in claim 164. Consequently, Applicant submits that Weinereich does not anticipate independent claim 164. Furthermore, for the same reason, Applicant submits that Weinreich does not anticipate dependent claims 165 – 171, which are dependent upon claim 164.

Walker discloses a system that reports matches to search criteria. In particular, Walker states:

> In response, central controller 200 searches database 255 for party data satisfying the search criteria (step 610). Controller 200 then transmits to requestor terminal 400 the results of the search, e.g., number of parties that it found to have party data satisfying the criteria (step 620). Alternatively, the number of parties would be transmitted to requestor terminal 400 along with pseudonyms for each of those parties.

(Walker, Col. 16, Lines 7 – 14, emphasis added).

In contrast to claim 164, Walker does not disclose or suggest "reporting matches to search criteria … so long as the number of person-to-person connections in a chain of person-to-person connections connecting the searcher and a potential target is within a specified connection threshold." Consequently, Applicant submits that Walker does not anticipate independent claim 164. For

the same reason, Applicant submits that Walker does not anticipate dependent

claims 165 – 171, which are dependent upon claim 164.

### New independent claim 172 is not anticipated by Gilmour, Weinreich, or Walker,  because none of the references disclose each and every limitation of claim 172.

Claim 172 states:

172 A computer-implemented method, comprising
reporting matches to search criteria specified in a search
initiated by a searcher <u>so long as a connection strength</u>
<u>between each two people forming a person-to-person</u>
<u>connection in a chain of person-to-person connections</u>
<u>between the searcher and a potential target exceeds a</u>
<u>connection strength threshold,</u> said connection strength
based on access control criteria that are selectably
controllable by any of one or more persons in said chain
of person-to-person connections between the searcher
and the potential target.

(Claim 172, emphasis added).  According to claim 172, a connection strength

measure is established based on access control criteria selectably controllable by

persons in a chain of person-to-person connections between a searcher and a

potential target.  For example, a user of the system may use access control criteria to

define the strength of relationship the user has with another user of the system.

Consequently, rather than simply determining if a relationship exists or not, search

results may be based on the strength of relationships existing between persons in a

chain of persons connecting the searcher and the potential target.

As discussed above, Gilmour relates to knowledgebase systems.  According

to Gilmour, keywords in an email are compared to keywords in a user's knowledge

profile to determine how best to address and route the email.  However, Gilmour

does not suggest or disclose "reporting matches to search criteria … **so long as a**

**connection strength between each two people forming a person-to-person**

**connection in a chain of person-to-person connections between the searcher and a**

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**potential target exceeds a connection strength threshold,"** as is recited in claim 172. Therefore, Applicant submits that Gilmour does not anticipate claim 172. Furthermore, Gilmour does not anticipate dependent claims 173 – 175, which are dependent upon claim 172.

Weinreich discloses a system in which matches are reported, based in part, on whether relationships between people exist, or do not exist. However, Weinreich does not disclose or suggest using access control criteria to establish a connection strength measure for a particular relationship between two persons. Specifically, Weinreich does not disclose or suggest "reporting matches to search criteria ... **so long as a connection strength between each two people forming a person-to-person connection in a chain of person-to-person connections between the searcher and a potential target exceeds a connection strength threshold,"** as is recited in claim 172. Consequently, Applicant submits that Weinreich does not anticipate claim 172. Furthermore, Applicant submits that Weinreich does not anticipate claims 173 – 175, which are dependent upon claim 172.

Walker is related to an employment search system with user controlled anonymous communications. Walker does not disclose or suggest "reporting matches to search criteria ... **so long as a connection strength between each two people forming a person-to-person connection in a chain of person-to-person connections between the searcher and a potential target exceeds a connection strength threshold,"** as is recited in claim 172. Consequently, Applicant submits that Walker does not anticipate claim 172. Furthermore, Applicant submits that Walker does not anticipate claims 173 – 175, which are dependent upon claim 172.

For the reasons stated above, Applicant submits that claims 148 – 175 are not anticipated by Gilmour, Weinreich or Walker. Consequently, Applicant respectfully requests that the claims be allowed.

3.     RESPONSE TO § 103 REJECTIONS

In the Office Action mailed December 22, 2004, the Examiner rejected claims 80 and 92 under 35 U.S.C. 103(a) as being obvious in view of the combination of Gilmour and U.S. Patent No. 6,567,784 to Bukow (hereinafter, "Bukow"). The Examiner rejected claims 84 – 85, 89, 107, 125 – 127 and 147 under 103(a) as being obvious in view of the combination of Gilmour and Weinreich. The Examiner rejected claims 93 – 101, 106, 115 – 116, 133, 139 – 142 under 103(a) as being obvious in view of the combination of Walker and Weinreich. In addition, the Examiner rejected claims 111, 113 – 114 as obvious in view of Weinreich and Bukow. Finally, the Examiner rejected claims 128 – 130 under 103(a) as being obvious in view of the combination of Weinreich and U.S. Patent No. 5,729,735 to Meyering (hereinafter, "Meyering").

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

**New independent claims 148, 164 and 172 are not obvious in view of Gilmour, Weinreich, and/or Walker, when considered singularly or in combination with any of the other references cited by the Examiner, because even when references are combined, the references do not disclose or suggest each and every limitation of claims 148, 164 and 172.**

Applicant submits that none of the references cited by the Examiner include limitations found in independent claims 148, 164 and 172. In particular, none of the

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references cited by the Examiner disclose or suggest the use of access control criteria that (1) are selectably controllable by persons in a chain of person-to-person relationships connecting the searcher and the potential target, and (2) define attributes of persons and persons' contacts that may be shared with others, as claimed in claim 148. Similarly, none of the references disclose or suggest using a specified connection threshold in the manner suggested in claim 164. Finally, none of the claims disclose or suggest reporting matches to searches so long as a connection strength between each two people forming a person-to-person connection in a chain of person-to-person connections between the searcher and a potential target exceeds a connection strength threshold, as is stated in claim 172. Consequently, Applicant submits that claims 148 – 172 are in a condition for allowance, which is respectfully solicited.
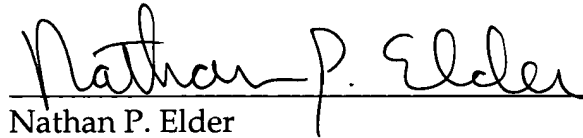
## 4.    CONCLUSION

For the reasons stated above, Applicant submits that all of the objections and rejections asserted in the Office Action mailed December 22, 2004 have been overcome. Accordingly, Applicant submits that the claims are now in a condition for allowance, which is respectfully solicited.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicants hereby request such an extension.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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